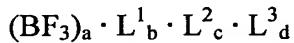


IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for preparing polyisobutene having a content of terminal vinylidene groups of at least 75 mol% by comprising polymerizing isobutene or isobutenic hydrocarbon mixtures in the liquid phase in the presence of a boron trifluoride complex catalyst of the composition



where

- L^1 is water, a primary C₁-C₅-alkanol and/or a secondary C₃-C₅-alkanol,
- L^2 is at least one aldehyde and/or one ketone,
- L^3 is an ether having at least 5 carbon atoms, a secondary alkanol having at least 6 carbon atoms, a primary alkanol having at least 6 carbon atoms and/or a tertiary alkanol,
- the b:a ratio is in the range from 0.9 to 3.0,
- the c:a ratio is in the range from 0.01 to 0.5,
- the d:a ratio is in the range from 0 to 1.0.

Claim 2 (Currently Amended): A The process as claimed in claim 1, wherein L^1 is selected from the group consisting of water, methanol, ethanol, 2-propanol, and 1-propanol and mixtures thereof.

Claim 3 (Currently Amended): A The process as claimed in claim 1or2, wherein L^2 is selected from the group consisting of formaldehyde, acetaldehyde, propionaldehyde, n-butyraldehyde, isobutyraldehyde, acetone, methyl ethyl ketone and diethyl ketone and mixtures thereof.

Claim 4 (Currently Amended): A The process as claimed in claim 1, wherein the d:a ratio is in the range from 0.1 to 1.

Claim 5 (Currently Amended): A The process as claimed in claim 4, wherein L³ is selected from the group consisting of methyl tert-butyl ether, di-n-butyl ether, di-n-hexyl ether and dioctyl ether and mixtures thereof.

Claim 6 (Currently Amended): A The process as claimed in claim 4, wherein L³ is selected from primary alcohols having β-branching.

Claim 7 (Currently Amended): A The process as claimed in claim 6, wherein L³ is selected from the group consisting of 2-ethylhexanol, 2-propylheptanol, the oxo alcohols of dimeric, trimeric and tetrameric propylene, and di- and dimeric butene, trimeric butene and mixtures thereof.

Claim 8 (Currently Amended): A The process as claimed in claim 4, wherein L³ is tert-butanol.

Claim 9 (Currently Amended): A The process as claimed in claim 4, wherein L³ is selected from n-hexanol and n-octanol.

Claim 10 (Currently Amended): A The process as claimed in any of the preceding claims claim 1 for preparing polyisobutene having a number-average molecular weight M_n of from 500 to 2500 dalton.